GEOGRAPHICAL PUBLICATIONS

(Reviews and Titles of Books, Papers, and Maps)

For key to classification see "Explanatory Note" in Vol. II, pp. 77-81

NORTH AMERICA

UNITED STATES

South-Central States

GITTINGER, ROY. **The formation of the state of Oklahoma (1803-1906).** 256 pp.; maps, bibliogr., index. *Univ. of California Publs. in History,* Vol. 6, 1917. University of California Press, Berkeley. 9½ x 6½.

Though the author of this volume has made no attempt to treat his subject from a geographical viewpoint, in fact usually seems unconscious of the geographical factors that entered into the development of Oklahoma, yet such factors cannot be hidden. They obtrude themselves continually. In each stage of the state's evolution from wild prairie to well-settled commonwealth the influence of topography, river routes, mountain passes, climate, or soil is apparent. Such detailed accounts form an excellent basis for the application of geographical principles.

This work is of peculiar value since it is not limited to Oklahoma alone but describes the political development of the state as an integral part of the great Southwest. The Louisiana Purchase; the formation of Missouri Territory (1812); the migration of Indian tribes from east of the Mississippi and their settlement in the old Indian Territory (then comprising a large part of what is now Kansas, Nebraska, and Colorado); the sweep of white settlement across the prairies; the creation of Kansas and Nebraska out of that larger Indian Territory; the struggle for slave and free states; the Indian's part in the Civil War; and finally the gradual infiltration of whites into the lands allotted to the various Indian tribes, resulting in the spectacular opening up of Oklahoma to settlement and the formation of the present progressive commonwealth—each of these stages is fully described.

Besides being a comprehensive story of Oklahoma's growth into statehood, the work will serve as a guide to the sources of her history and will be of high value to other students in the same field. The author has drawn largely upon the treasure house of United States government documents, as was, of course, necessary since Oklahoma has been until recently under federal control. He has also collected the scattered material in periodical literature and particularly in historical society publications of neighboring states. Thus Professor Gittinger has written a volume which will undoubtedly remain a standard reference work for the history of the state.

MATTESON, W. G. **A review of the development in the new central Texas oil fields during 1918.** Maps, ills., diagr. *Econ. Geology,* Vol. 14, 1919, No. 2, pp. 95-146. Lancaster, Pa.

SOUTH AMERICA

ECUADOR, PERU, BOLIVIA

PERRIER, G., edit. **Mission du Service Géographique de l'Armée pour la mesure d'un arc de méridien équatorial en Amérique du Sud, sous le contrôle scientifique de l'Académie des Sciences, 1899-1906. Vol. 2, Part I: Atlas. Introduction générale aux travaux géodésiques et astronomiques primordiaux de la Mission. Notices sur les stations.** 27 pp.; maps. Ministère de l'Instruction Publique, Paris, 1913. 11 x 9.

As a result of proceedings initiated at the meeting of the International Geodetic Association in 1889 the French Government undertook the measurements of a new meridian arc in the highlands of Ecuador (see G. W. Littlehales: The Recent Scientific Missions for the Measurement of Arcs of the Meridian in Spitzbergen and Ecuador, *Bull. Amer. Geogr. Soc.,* Vol. 39, 1907, pp. 641-653). The expedition was in the field from 1901 to 1906 and, besides executing its primary object, was also able to make studies in the natural history, ethnography, and anthropology of the region. Results have been published as they have been worked up. The last part that has appeared

up to date, and one of the most interesting geographically, is the atlas of topographic surveys and plans. The observers at the triangulation stations were required to construct topographic surveys of their surroundings with a twofold object in view—for reconstruction of the site of the station and for study of the gravity action due to the mountain masses in the vicinity of the stations. Of the 78 stations of the first order the present atlas includes surveys of 41; twenty of the remainder will be included in the more extended surveys which will appear in the volume (not yet published) devoted to detailed triangulation of the region (for plan of triangulation see that accompanying the article by Littlehales).

The other volumes or parts of volumes that have already appeared are: Vol. 3, Part I, Angles azimutaux (1910); Part II, Compensation des angles, calcul des triangles (1912); Part VII, Latitudes astronomiques observées aux théodolites à microscopes (1910); Vol. 6, Ethnographie ancienne (1912); Vol. 9, Zoologie, Part I, Mammifères, oiseaux, trochilidés (1911); Part II, Reptiles, poissons, batraciens (1911); Part III, Mollusques, annélides, oligochètes (1910); Part IV, Actinies (1910-1912); Vol. 10, Entomologie, botanique, Part I, Hyménoptères, orthoptères, nevroptères, araignées. Vol. 6, Ethnographie ancienne, has been analyzed by Pierre Denis in *Ann. de Géogr. Bibliogr. Géogr. Annuelle* for 1912.

BRAZIL

CHERRIE, G. K. **From Central Matto Grosso overland to the coast.** Map, ills. *Bull. Pan Amer. Union,* Vol. 46, 1918, No. 6, pp. 759-771. [A short note on a trip over the railroad recently constructed to Corumbá.]

CRANDALL, RODERIC. **Notes on the geology of the diamond region of Bahia, Brazil.** Map, diagrs. *Econ. Geology,* Vol. 14, 1919, No. 3, pp. 220-244. Lancaster, Pa. [Containing some topographical description of the region.]

FARABEE, W. C. **A pioneer in Amazonia: The narrative of a journey from Manaos to Georgetown.** Map, ills. *Bull. Geogr. Soc. of Philadelphia,* Vol. 15, 1917, No. 2, pp. 57-103. [Abstracted in the *Review,* Vol. 4, 1917, pp. 397-398.]

GIGLIOLI, ITALO. **Italiani e tedeschi nel Brasile; i Valdesi nell' Uruguay: Euconomia più che economia.** 29 pp.; bibliogr. Reprint from *L'Agricoltura Coloniale,* 1917, November 30. Florence. 9½ x 7.

KAPPETEIN, P. C. **Bevolking en economische ontwikkeling van Brazilië.** *Tijdschr. voor Econ. Geogr.,* Vol. 8, 1917, No. 7, pp. 209-219.

MARTIN, P. A. **The influence of the United States on the opening of the Amazon to the world's commerce.** *Hispanic Amer. Hist. Rev.,* Vol. 1, 1918, No. 2, pp. 146-162. Baltimore.

MORIZE, H., AND H. F. DA SILVA. **Results of geographic and magnetic survey of the southern part of Brazil, 1913-15.** *Terrestr. Magnet. and Atmosph. Electr.,* Vol. 21, 1916, No. 3, pp. 147-149.

MOSSMAN, R. C. **Notes on the climate of the state of São Paulo, Brazil.** Map. *Quart. Journ. Royal Meteorol. Soc.,* No. 189, Vol. 45, 1919, pp. 53-63. London.

MOSSMAN, R. C. **The rainfall of Fortaleza, Ceará, Brazil.** Diagr. *Quart. Journ. Royal Meteorol. Soc.,* No. 189, Vol. 45, 1919, pp. 69-79. London.

—— **Paraná, Geologia do Estado do.** Ills., bibliogr. *Bol. Minist. da Agric., Indust. e Commerc.,* Vol. 5, 1916, No. 1, pp. 67-143. Rio de Janeiro.

PINTO, E. R. **The Indians of Serra do Norte, Matto-Grosso, Brazil.** Map, ills., bibliogr. *Proc. 2nd Pan Amer. Sci. Congr., Dec. 27, 1915, to Jan. 8, 1916,* Vol. 1, Section 1: Anthropology, pp. 358-362. Washington, D. C., 1917. [The Nambikuáras (Nhambiquaras). No reliable information on these Indians was obtained until Colonel Rondon's explorations in 1907. Later Colonel Roosevelt passed through the region. The author obtained there a great ethnographical collection in 1912.]

RANGEL, ALBERTO. **Aspectos geraes do Brasil.** *Rev. Inst. Hist. e Geogr. Brasileiro,* Vol. 76, 1913, Part I, pp. 455-517. Rio de Janeiro, 1915.

SCHERRER, JOSEPH. **Historisch-geographischer Katalog für Brasilien (1500-1908).** *Annaes Bibliotheca Nacl. do Rio de Janeiro,* Vol. 35, 1913, pp. 313-418.

SCHULLER, R. R. **A Nova Gazeta da Terra do Brasil (Newen Zeytung auss Presillg Landt) e sua origem mais provavel.** Map, ills. *Annaes Bibliotheca Nacl. do Rio de Janeiro,* Vol. 33, 1911, pp. 115-143.

STURZENECKER, G. R. **Contribuição para o estudo da orographia brasileira.** *Proc. 2nd Pan Amer. Sci. Congr., Dec. 27, 1915, to Jan. 8, 1916,* Vol. 2, Section 2: Astronomy, Meteorology, and Seismology, pp. 310-318. Washington, D. C., 1917.

ZEHNTNER, LÉO. **Estudo sobre as maniçobas do Estado da Bahia, em relação ao problema das seccas.** 113 pp., map, ills. *Inspectoria de Obras Contra as Seccas Publ. No. 41.* Rio de Janeiro, 1914.

LANE, GUILHERME, AND VIRGILIO PINHEIRO. ***Mappa do Estado de Alagoas.*** 1:500,000. *Inspectoria de Obras Contra as Seccas Publ. No. 44.* [Rio de Janeiro,] 1917. [Relief in brown shading; distinction between perennial and non-perrenial streams. Railroads, telegraph lines, and roads shown.]

RICE, A. HAMILTON. ***Survey of the Rio Negro, from Manáos to São Gabriel, Jan.-Mar., 1917.*** 1:750,000. Accompanying the article "Notes on the Rio Negro (Amazonas)" by A. Hamilton Rice, *Geogr. Journ.,* Vol. 52, 1918, No. 4, pp. 205-218 (map opp. p. 276).

EUROPE

THE LOW COUNTRIES, LUXEMBURG

SCHRIJNEN, JOS. **Nederlandsche Volkskunde.** xx and 316 pp.; diagrs., index. W. J. Thieme & Cie., Zutphen, [1915?]. 3 fr. 75. 9½ x 7.

The author is a member of the faculty of the Government University of Utrecht, and this work is a compilation of the superstitions, racial differences, and racial characteristics of the inhabitants of the Netherlands and may be said to have attained the pinnacle of thoroughness. No single phase of the curious details of Dutch life is omitted by the author, and it must regretfully be stated that his tedious volume, while scholarly in the extreme and having all the earmarks of careful research, goes far towards defeating the object he hopes to attain, that is the awakening of an interest in the customs of his native land.

Dr. Schrijnen is careful to explain in his introduction that the English conception of the word "folklore" must not be applied to the Dutch word "Volkskunde." Even here his passion for details comes to the fore, and his reader has to wade through a complete biography of the abused word, beginning with an issue of the British *Athenaeum* for 1846 in which is found an article by Mr. Thoms of the Camden Society wherein the word "folklore" is first used, and ending with the founding of the London Folklore Society in 1877. From "folklore" Dr. Schrijnen, by easy stages, drifts to "Volkskunde," which can best be translated by "ethnology," until he concludes by giving his personal definition of the word used in the title of his work. This definition is as follows—and the translation is literal—: "a systematic, rational study of the basis of culture. It is the ethnology of cultured races." In consequence, such students as take the definition seriously will be forced to coin a new word when they deal with the "ethnology of *savage* races," and it might be interesting to know what Dr. Schrijnen's word for this would be.

While "Nederlandsche Volkskunde" is more than tiresome, one has to pay a tribute to its author for the care with which he has compiled his information. To students of native games, for example, his classification of and exhaustive data on games of all kinds must prove of the greatest aid for purposes of reference. His chapter on the religious and heathen superstitions of all parts of the Netherlands is also exhaustive, and he traces back many of the old jingles and festive songs to their remote ancestry, thereby giving his reader a curious insight into the different races which went to make up the people of the Netherlands. In matters like these the book has decided merit; and, as the author has added a complete index, the volume will probably often be used for reference.

It would seem well-nigh impossible for Dr. Schrijnen to find enough material in the Netherlands of the kind included in this first volume to fill his promised second one, even though he mentions in his introduction that it will contain an "ethno-geographical chart in which the distribution of some folkloristic [the author's word] boundaries (dialects, place names, types of farmhouses, etc.) is indicated by decided lines, in order to see what results one can attain towards a more intimate knowledge of the racial division of the Netherlands." THEODOOR DE BOOY

BEEKMAN, A. A. **De stormvloed van 13-14 Januari 1916.** *Tijdschr. Kon. Nederl. Aardrijk. Genoot.,* Vol. 33, 1916, No. 3a, pp. 364-394.

BELLOC, HILAIRE. **The significance of Ardennes.** Maps. *Land and Water,* No. 2941, Vol. 71, 1918, Sept. 19, pp. 3-6. London.

BLANCHARD, RAOUL. **L'origine des moëres de la plaine maritime de Flandre.** *La Géographie,* Vol. 31, 1916-17, No. 5, pp. 337-342. Paris. [*Moëres*=meres, marshes.]

BLINK, H. **Economische geographie der Provincie Overijsel.** Maps. *Tijdschr. voor Econ. Geogr.,* Vol. 7, 1916, No. 3, pp. 89-128; No. 8, pp. 395-404. **De economische ontwikkeling van Overijsel in de laatste eeuw,** *ibid.,* No. 9, pp. 427-441. **Ontwikkeling der nederzettingen in Overijsel als economische centra,** *ibid.,* No. 10, pp. 478-490. The Hague.

BONGAERTS, M. **De kanalisatie van de Maas en haar economische gevolgen.** *Tijdschr. voor Econ. Geogr.,* Vol. 7, 1916, No. 1, pp. 5-14. The Hague.

DEMANGEON, A. **Anvers.** *Ann. de Géogr.,* No. 148-149, Vol. 27, 1918, pp. 307-339. [A study of its geographical *raison d'être.*]

LORIÉ, J. **Geologische beschouwingen over het eiland Voorne.** Map, diagrs., bibliogr. *Tijdschr. Kon. Nederl. Aardrijk. Genoot.,* Vol. 34, 1917, No. 6, pp. 781-799.

MASSART, JEAN. **D'où vient la flore du littoral belge?** Map, diagr. *Ann. de Géogr.,* No. 137, Vol. 25, 1916, pp. 321-327. [The coast of Belgium, being of recent origin, affords a good field for the study of plant migration. The author's conclusion is that the Belgian species came from the south rather than from the north. A map, 1:25,000,000, of the vegetational regions of the greater part of Europe accompanies the paper.]

RUTGERS, H. **Daalt of rijst de bodem van Nederland?** *Tijdschr. Kon. Nederl. Aardrijk. Genoot.,* Vol. 34, 1917, No. 4, pp. 467-480.

—— ***Ypres area, Map showing progress in the.*** 8th edit. 1:40,000. *Geogr. Sect. Genl. Staff* [*Map*] *No. 3588.* Ordnance Survey, [Southampton], Nov., 1917. [Relief in contours (interval 5 meters) and supplemental brown tints for 30-40, 40-50, 50-60, and above 60 meters. Lines of Allied advances from June 12 to November 17, 1917, shown in blue; also German trenches and other military works in red.]

BALKAN STATES, INCLUDING RUMANIA

GRAVIER, GASTON. **Les frontières historiques de la Serbie.** Preface by Émile Haumant. 164 pp.; maps. Librairie Armand Colin, Paris, 1919. 4 fr. 9 x 5½.

At the time of his gallant death at the front in 1915 Gaston Gravier had two major works in hand, the one on the natural regions of Serbia, the other on the territorial formation of the Serbian state (*Ann. de Géogr.,* Vol. 24, 1915, p. 456). The latter was completed save for a final revision and has now been published under the above title. Its primary interest is expressed in the author's own words (p. 4): "Serbia offers perhaps the most representative example of the type of state which has arisen and developed in that ill-defined, ill-differentiated zone where contact is established between two worlds profoundly different in race and civilization."

ALMAGIÀ, ROBERTO. **Tracce glaciali nelle montagne dell'Albania.** *Riv. Geogr. Italiana,* Vol. 25, 1918, No. 3-4-5, pp. 85-95. Florence.

BARNES, J. S. **The future of the Albanian state.** Map, ills. *Geogr. Journ.,* Vol. 52, 1918, No. 1, pp. 12-30 (discussion, pp. 27-30). [Part I is concerned with boundaries: "The first and fundamental principle here to be taken into consideration in the task of boundary delimitation is that of nationality, which in the case of Albania happily coincides with race and language"; Part II deals with the political future.]

DENIS, E. **La grande Serbie.** xiii and 336 pp.; maps, index. Librairie Delagrave, Paris, 1915. 3 fr. 50. 7 x 4½.

FAUCHER, D. **Contribution à la détermination des niveaux lacustres de la basse vallée du Vardar.** *Comptes Rendus de l'Acad. des Sci.* [*de Paris*], Vol. 168, 1919, No. 9, pp. 462-464.

FAUCHER, D. **Le Tikvèš.** *La Géographie,* Vol. 32, 1918, No. 4, pp. 226-230. Paris. [The ancient lake bottom occupying the angle between the Vardar and the Cherna in Macedonia.]

MUZET, ALPHONSE. **Le monde balkanique.** 314 pp.; map. Ernest Flammarion, Paris, 1917. 3 fr. 50. 7 x 5.

NEWBIGIN, M. I. **The problem of the South Slavs (Yugoslavs).** Ills. *Scottish Geogr. Mag.,* Vol. 35, 1919, No. 1, pp. 1-15.

NIOX, GENERAL. **Les pays Balkaniques.** 2nd edit. vi and 188 pp.; index. Librairie Delagrave, Paris, 1915. 2 fr. 50. 7 x 4½.

SUGAREFF, V. K. **The Bulgarian nationality of the Macedonians.** *Journ. of Race Devel.*, Vol. 9, 1919, No. 4, pp. 382-393. Worcester, Mass.

TAÜBER, C. [*sic*, i. e. TÄUBER, C.] **La mia traversata delle Alpi albanesi settentrionali.** Ills. *Riv. Mensile Club Alpino Italiano*, Vol. 35, 1916, No. 2, pp. 47-53; No. 3, pp. 81-85; No. 4, pp. 111-117. Milan.

WARING, L. F. **Serbia.** With a preface by J. M. Jovanovitch. 256 pp.; map, bibliogr., index. (Home University Library.) Henry Holt & Co., New York, 1918(?). 7 x 4½.

—— ***Europe, International map,*** 1:1,000,000. Sheet: ***North K 35, Istambul (Constantinople).*** Layered. Boundary revised Nov. 1918. *Geogr. Sect. Genl. Staff* [*Map*] *No. 2555.* War Office, London, 1918.

AFRICA

SOUTH AFRICA

MOLSBERGEN, E. C. G. **Reizen in Zuid-Afrika in de Hollandse tijd. Vol. 2: Tochten naar het Noorden 1686-1806.** xxxvii and 310 pp.; map, ills., bibliogr., index. (Werken uitgegeven door de Linschoten-Vereeniging, Vol. 12.) Martinus Nijhoff, The Hague, 1916. 10 x 7.

The Linschoten Society, founded in the Netherlands ten years ago, has most energetically carried on its purpose to print important and hitherto unpublished records of early travel by Dutch explorers. Its publications, thus far, embrace Dutch travels in the Arctic and the East Indies; Roggeveen's circumnavigation of the world from east to west in 1721-22, during which he discovered a considerable number of Pacific islands; the explorations of de Vries in parts of Europe and America; researches on the Guinea coast; and two volumes on the early Dutch expeditions into the interior of South Africa. In this, the second volume of the South Africa travels, we see the Dutch afield to the north of the Orange River, both in the interior of the continent and along the west coast as far north as Walfish Bay. The explorers found that both the giraffe and the elephant were already retreating to the north of the Orange River, as the natives who hunted them had been strongly reinforced by Dutch sportsmen.

The volume is well illustrated by clear and graphic drawings and a map of South Africa in the early days of its exploration. The work of the Linschoten Society, in rescuing from oblivion the important records it has thus far published, deserves the hearty appreciation of all geographers. CYRUS C. ADAMS

ALMEIDA D'ECA, VICENTE. **The economic resources of the territories of the Companhia do Nyassa.** *Trans. 3rd Internatl. Congr. of Tropical Agric. Held at the Imperial Inst., London, June 23-30, 1914*, Vol. 2, pp. 504-525. Internatl. Assoc. for Tropical Agric., London, 1917.

BEATTIE, J. C. **Further magnetic observations in South Africa during the years 1913-1915.** *Trans. Royal Soc. of South Africa*, Vol. 5, 1917, Part VI, pp. 669-670. Cape Town.

BLAAUW, F. E. **Waarnemingen op het gebied van dierengeografie in Zuid-Afrika.** *Tijdschr. Kon. Nederl. Aardrijk. Genoot.*, Vol. 33, 1916, No. 6, pp. 890-903.

COX, G. W. **The intensity of rainfall in the Transvaal.** Map, diagrs. *South African Journ. of Sci.*, Vol. 12, 1915-16, No. 13, pp. 686-693. Cape Town.

CRABTREE, W. A. **Lake Bangweulu and its inhabitants.** Ills. *Journ. African Soc.*, No. 63, Vol. 16, 1917, pp. 216-226. London and New York. [A review of the works of the Swedish ethnologist, Eric von Rosen: Från Kap till Alexandria (Stockholm, 1912) and Träskfolket: Svenska Rhodesia-Kongo-expeditionens etnografiska forsknings resultat (Stockholm, 1916).]

DU TOIT, A. L. **The zones of the Karroo system and their distribution.** Map. *Trans. and Proc. Geol. Soc. of South Africa*, Vol. 21, 1918, pp. xvii-xxxvi. Johannesburg. [Presidential address at the annual meeting, March 21, 1918.]

EVANS, M. S. **The natives of Natal in relation to the land.** *South African Journ. of Sci.*, Vol. 15, 1918-19, No. 4, pp. 235-246. Cape Town. [A study of land tenure.]

GOOLD-ADAMS, HAMILTON. **South-Central Africa.** 26 pp.; maps, ills. Reprinted from *Truth*, 1915, Sept. 19. Royal Geogr. Soc. of Australasia, Queensland. [Brisbane.]

HALL, A. L. **Asbestos in the Union of South Africa.** 152 pp.; map, diagrs., ills., bibliogr., index. *Geol. Survey of Union of South Africa Memoir No. 12.* Pretoria. 5s. 9½ x 6.

HETHERWICK, A. **Nyasaland to-day and to-morrow.** Ills. *Journ. African Soc.*, No. 65, Vol. 17, 1917, pp. 11-19. London and New York.

LACY, GEORGE. **South African exploration. Pioneer hunters, traders, and explorers of South Africa. The experiences of early travellers in Southwest Africa.** 28 pp. ("South Africa" Handbooks, No. 91.) Reprinted from *South Africa*, July, 1918. London. 6d. 6 x 5.

LEGAT, C. E. **Timber supplies and forestry in the Union.** *South African Journ. of Sci.*, Vol. 15, 1918-19, No. 2, pp. 79-99. Cape Town.

MASON, M. H. **The Transkei.** Map, ills. *Geogr. Journ.*, Vol. 52, 1918, No. 1, pp. 30-43 (discussion, pp. 41-43).

PHILLIPS, E. P. **A note on the flora of the Great Winterhoek Range.** *South African Journ. of Sci.*, Vol. 15, 1918-19, No. 4, pp. 226-234. Cape Town. [A study of the vegetation existing under mountain conditions.]

RANGE, PAUL. **Ergebnisse von Bohrungen in Deutsch-Südwest-Afrika.** 137 pp.; map, ill. *Beiträge zur geol. Erforschung der Deutschen Schutzgebiete No. 11.* Berlin, 1915.

RINDL, M. M. **The medicinal springs of South Africa: Supplement I.** *South African Journ. of Sci.*, Vol. 15, 1918-19, No. 4, pp. 217-225. Cape Town. [The continuation of a paper with the same title which appeared in the June, 1917, issue of this journal.]

ROGERS, A. W. **Namaqualand.** *South African Geogr. Journ.*, Vol. 1, 1917, No. 1, pp. 23-33. Johannesburg.

SIM, T. R. **The black wattle industry.** *South African Journ. of Sci.*, Vol. 13, 1916-17, No. 7, pp. 279-301. Cape Town. [In past years large quantities of the tanning material, black wattle bark, have been exported from Australia. Today a practical monopoly of the export is held by Natal, where, through an unusually fortunate combination of circumstances, the industry is in a flourishing condition. Climate, soil, and labor are all conducive to its success. Labor, cheap in Natal, is prohibitive in cost in Australia and New Zealand. Areas in the Cape otherwise suitable may better be devoted to cattle raising, as in the United States alfalfa and fruits are more profitable in the sections where climatic conditions are right for wattle cultivation. Heretofore the Natal bark has been exported overseas; now with the development of a South African meat export trade and opportunity for the scientific handling of hides the product may be used at home.]

TÖNNESEN, T. **The South-West Africa Protectorate.** Map, ills. *Geogr. Journ.*, Vol. 49, 1917, No. 4, pp. 282-300.

WAGNER, P. A. **The mineral industry of the Union of South Africa and its future.** Map. *South African Journ. of Sci.*, Vol. 15, 1918-19, No. 2, pp. 45-78. Cape Town.

ASIA

MALAY ARCHIPELAGO, INCLUDING THE PHILIPPINES

LEE, J. C. H. **The manual for topographers: Philippine Department, United States Army, 1915.** 117 pp.; diagrs. *Occasional Papers No. 52.* Engineer School, U. S. Army, Washington Barracks, D. C., 1917. 9 x 6.

Military surveys in the Philippine Islands have been in operation almost from the beginning of the American occupation. Their object is to furnish reliable maps of all territory suitable for military operations in the archipelago. Geographical positions are referred to the Luzon datum of the Coast and Geodetic Survey. The main control is triangulation of tertiary or higher accuracy. A polyconic projection is used; scale 2 inches to 1 mile; contour interval, 20 feet. In trail work where limited topography is shown the scale is reduced to 1 inch to 1 mile, and in mountainous country the contour interval may be 100 feet.

In addition to explanation of the policy, organization, standards, and methods of the survey and its relations to the civil government, Captain Lee's manual includes care and adjustment of instruments, field triangulation, control traverses, needle traverses, differential leveling, azimuth, topography, the elevation datum, time, suggestions to computers, mess and ration accounts, sanitation, and definitions. Sample forms for all records are shown and in the appendixes are reproduced various necessary tables. JAMES GORDON STEESE

LEKKERKERKER, C. **Land en Volk van Sumatra.** x and 368 pp.; map, diagrs., ills., index. E. J. Brill, Leiden, 1916. 7.50 gulden. 10 x 7.

A few years ago the Royal Colonial Institute of the Netherlands offered a prize for the best handbook describing the resources and ethnology of the island of Sumatra, the Institute being desirous of calling the attention of the outside world to the growing importance and the latent possibilities of this westernmost outpost of the Dutch East Indian archipelago. This prize was awarded to Mr. C. Lekkerkerker, a former school inspector of the colonial government and the keeper of the archives of the Bali Institute.

There can be no doubt that the author's "Geography and Ethnology of Sumatra" is an exhaustive treatise. It bears all the earmarks of accurate and painstaking compilation. At times, in fact, the work becomes trite through its very completeness, and Mr. Lekkerkerker's many years of teaching appear to have tainted his spirit with a desire to drum knowledge into his reader's mind by constant repetition. No user of a geographical handbook can consider that his intelligence is being complimented when he has to wade through a lengthy description of the exact manner in which a mangrove tree spreads its roots and acts as a trap for alluvial river mud (p. 6), nor does he particularly care to be told that coconut shells, when filled with rain water, are a menace to public health because they offer a breeding place for the larvae of mosquitoes (p. 105).

Despite this drawback, the author has filled his handbook with valuable information. When one considers that at the present time Sumatra is cultivated only to the extent of two or three per cent of its area and could readily sustain twenty times its present population, it will be seen that this information may not come amiss to intending developers of the resources of the island. The petroleum deposits, the coal mines, the rubber lands, and many other possibilities are attractive openings for foreign capital cited by Mr. Lekkerkerker.

The author is happier in his ethnographic description of the island. The ethnological student finds much of interest. The enumeration and classification of the numerous tribes comprising the 5,000,000 inhabitants of Sumatra are not only of high value but are a pioneer effort at a systematic ethnological census of the indigenous races.

The author adds a brief résumé of Sumatra's history and settlement by white colonizers and gives an insight into the causes of the war between the Dutch government and the inhabitants of Atjeh, the northern part of the island.

A clear and excellent map of Sumatra (1:2,500,000) accompanies the volume. Two insets, one of the geological formation (1:7,500,000) of the entire island and one of the agricultural areas now under development on the eastern coast (1:1,500,000), are also especially good. THEODOOR DE BOOY

ABENDANON, E. C. **Historische geologie van Midden-Celebes.** *Tijdschr. Kon. Nederl. Aardrijk. Genoot.*, Vol. 34, 1917, No. 3, pp. 440-456; No. 4, pp. 548-564.

ANDERSON, ISABEL. **The spell of the Hawaiian Islands and the Philippines.** xiv and 373 pp.; maps, ills., bibliogr., index. (The Spell Series.) Page Co., Boston, 1916. $2.50. 8 x 5½.

BARTON, R. F. **Ifugao law.** 127 pp.; map, ills., glossary. *Univ. of California Publs. in Amer. Archaeol. and Ethnol.*, Vol. 15, 1919, No. 1. Univ. of California Press, Berkeley. 11 x 7. [This treatise consists principally of an ethnological study of customs among the Ifugaos, as related to their tribal law. These people, a Malayan hill tribe, inhabit an isolated section in the center of northern Luzon. They are a sedentary race, with a highly developed terrace agriculture and extensive irrigation for the cultivation of rice. Yet they have no political government, no officers of the law, no courts, no judges. Their social relations, tenure of property, and even financial dealings are regulated by custom, which is so strong and so universally complied with that they have long maintained a fair degree of order in their district without interference on the part of Spanish or American authorities.]

CHU, CO-CHING. **Some new facts about the centers of typhoons.** Diagr. *Monthly Weather Rev.*, Vol. 46, 1918, No. 9, pp. 417-419. Washington, D. C.

D'ALMONTE, ENRIQUE. **Formación y evolución de las sub-razas indonesia y malaya.** Diagrs., ills., bibliogr. *Bol. Real Soc. Geogr.*, Vol. 59, 1917, No. 1, pp. 7-109; No. 2-3, pp. 129-321; No. 4, pp. 398-478. Madrid.

HEISER, V. G. **American sanitation in the Philippines and its influence on the Orient.** *Proc. Amer. Philos. Soc.*, Vol. 57, 1918, No. 1, pp. 60-68. Philadelphia.

HOUWINK, L. **De artesische boringen in het bekken van Batavia.** *Tijdschr. Kon. Inst. van Ingenieurs Afdeeling Neder.-Indië*, 1914, No. 2, pp. 5-12. Batavia.

MAGALHAES, A. L. DE. **A ilha de Ataúro (Província de Timôr): Noticia sôbre a ilha e seus habitantes.** *Bol. Soc. de Geogr. de Lisboa*, Ser. 36, 1918, No. 1-3, pp. 53-70; No. 4-6, pp. 164-178. [Ataúro, usually called Cambing (or Kambing), is a small island lying just north of Timor in the Portuguese East Indies. The writer gives a description of the physical features of the island, its resources, people, etc.]

MOLENGRAAFF, G. A. F., AND OTHERS. **De geologie van het eiland Letti.** (Nederlandsche Timor-Expeditie 1910-1912.) Ills., index, bibliogr. *Jaarboek van het Mijnwezen in Nederl. Oost-Indië*, Vol. 43, 1914, Part I, pp. 1-232. The Hague.

—— **Philippine Islands, Report of the Governor General of the, to the Secretary of War, 1917.** iv and 188 pp.; index. Washington, D. C., 1918.

—— **Philippine Islands, The mineral resources of the, for the year 1915.** 39 pp.; map, diagrs., ills. Division of Mines, Bur. of Sci., Manila, 1916.

—— **Philippine Islands, The mineral resources of the, for the year 1916.** 31 pp.; maps, diagr., ills. Division of Mines, Bur. of Sci., Manila, 1917.

RABOT, CHARLES. **L'œuvre géographique des Néerlandais en Malaisie.** *La Géographie*, Vol. 32, 1918, No. 1, pp. 10-19. Paris. [A summary of recent work.]

SMITH, HARRISON W. **Sarawak: The land of the white rajahs.** Map, ills. *Natl. Geogr. Mag.*, Vol. 35, 1919, No. 2, pp. 110-167.

SMITH, WARREN D. **Geologic and physiographic influences in the Philippines.** Maps, ill. *Bull. Geol. Soc. of America*, Vol. 28, 1917, No. 3, pp. 515-542. [Physiographic conditions are invoked—here and there a little too plausibly—to explain human development. The response of Manila to its physical environment is especially worth noting. The city is built at a point where sea, plain, lake, and river are in juxtaposition, a combination rare in the islands. The Pasig River is the main artery to the rich lake country to the southeast. The plain affords not only excellent agricultural land but, built of alternating loose pyroclastics and shales, has an exceptionally good supply of artesian water. The bay, with narrow outlet and wide flaring interior, is one of the safest (from seismic disturbance) and best protected in the world. In its broader relations Manila also occupies an enviable position in the Orient, being in close touch with Malaya and midway between the rich plains of China and the growing continent of Australia.]

—— ***Coron Bay, Philippine Islands, Western entrance to.*** 1:50,000. *U. S. Coast and Geodetic Survey Chart No. 4350.* Washington, D. C., Jan., 1919.

—— ***Cuyo Islands, Philippine Islands, Anchorages in.*** (1) ***Cuyo Islands, Cuyo Anchorage, and Bisucay Channel,*** 1:10,000, from surveys of 1912; (2) ***Cuyo Islands, Tagauayan Islands,*** 1:10,000, from surveys of 1915. *U. S. Coast and Geodetic Survey Chart No. 4336.* Washington, D. C., Sept., 1918.

—— ***Cuyo Islands, Philippine Islands.*** 1:100,000. *U. S. Coast and Geodetic Survey Chart No. 4312.* Washington, D. C., March, 1918.

—— ***Shark Fin Bay to Flechas Point, Northeast coast of Palawan, Philippine Islands.*** [1:100,000.] *U. S. Coast and Geodetic Survey Chart No. 4317.* Washington, D. C., April, 1918.

AUSTRALASIA AND OCEANIA

AUSTRALIA, NEW ZEALAND

TAYLOR, GRIFFITH. **The Australian environment (especially as controlled by rainfall).** 188 pp.; maps, diagrs., bibliogr. *Commonwealth Advisory Council of Science and Industry Memoir No. 1.* Melbourne, 1918.

For no part of the world have we at the present time so clear, so practical, so complete, and so useful a series of climatological and meteorological studies as that which is available for the Commonwealth of Australia. Under the able direction of Mr.

Henry A. Hunt, Commonwealth Meteorologist, the Australian Bureau of Meteorology has issued a set of regular reports and of bulletins in which that bureau may well take pride and for which the climatologists of the world are under deep and lasting obligations. In recent years Dr. Griffith Taylor, physiographer in the Commonwealth Bureau of Meteorology, instructor at Melbourne University, and lecturer at the Commonwealth Flying School, has been especially active in presenting the larger facts, as well as the details, of Australian climatology and meteorology in an original and remarkably successful manner. In his latest publication on "The Australian Environment" he gives us a regional study of the topography, drainage, vegetation, settlement, and of the character and origin of the rains, which is not only indispensable to all who are in any way concerned with the region with which it deals, but may well serve as a model and as an inspiration for those who are attempting similar studies of other parts of the world. The appearance of this report at the present time is due to the generosity of the Advisory Council of Science and Industry in providing the money to have it printed.

"The Australian Environment" is the third of a series dealing with the climatic control of settlement in Australia. The first was published in 1916, as *Bulletin No. 14*, "The Control of Settlement by Humidity and Temperature" (see *Geogr. Rev.*, Vol. 4, 1917, pp. 401-403, and Vol. 5, 1918, p. 86). The second, *Bulletin No. 11*, discussed the control exercised by rainfall and temperature on the three chief products of Australia—cattle, sheep, and wheat (see *Geogr. Rev.*, Vol. 1, 1916, p. 396). In this an estimate was made of the probable extension of these industries in the future.

The fundamental conception of the author in the present monograph is concerned with the rains of Australia. The sun causes migrations ("surges") in the "moisture belt" of the atmosphere. This belt is broken into the various storm systems, which actually bring the different types of rainfall. A discussion of the topography and of its evolution is included for the reason that the surface features are largely the result of the action of the falling rain and of its consequent drainage and also, in their turn, control the general distribution of the rainfall. The natural vegetation depends primarily upon this rainfall and prepares the way for man's occupation. Finally, a study of man's experience in similar natural regions elsewhere leads to a summary of the industrial and hygienic aspects of the Australian region. This sequence of thought is the framework upon which the whole study is built up.

The sun being the fundamental control upon which all the other conditions depend, a simple, original, and very ingenious cardboard "solar control model" has been devised, which, when properly cut out and adjusted, shows, month by month, the winds, pressure, storms, and rains which prevail over Australia. The migrations of the tropical rain belt, and of the other varying atmospheric phenomena which oscillate in unison with the movement of the sun, are admirably shown by means of this model, which emphasizes, in a very striking way, the interdependence of meteorological phenomena. The centers of pressure and their accompanying winds swing slowly 1,000 miles north and the same distance south during the year, at the same time having a general west-to-east progression of about 400 miles a day. Dr. Taylor well points out that the former slow movement determines the *climate*, while the latter, with its local oscillations and stoppages, controls the *weather*.

A new and interesting chart is that which shows rain reliability (Fig. 5), on which are indicated the percentage variations from the normal annual rainfall (1891-1910). This shows where the rains are likely to agree with the average rainfall and is of great value in forecasting. By means of it the possibility of agriculture in various parts of the continent can be deduced. Another original map is that of the zones of rainfall uniformity (Fig. 7). This does not take account of fluctuations but of averages, the lines showing the number of months during a year which receive over one inch of rainfall. The area with over one inch of rainfall during 12 months is confined almost wholly to the southeast. These rainfall maps are directly followed by a vegetation map, based on the German map by Diels, a comparison of which with the preceding rainfall maps shows a remarkably close correspondence.

The "climograph," previously discussed by Dr. Taylor in *Bulletin No. 14* of the Commonwealth Bureau of Meteorology (see this *Review*, Vol. 5, 1918, p. 86), is used to correlate the various types of Australian climate with those of other parts of the world, and deductions are made as to the probability of settlement of various districts by white men and as to the crops which are most likely to succeed. This is a practical problem of immediate and future economic and political importance in connection with the settlement of the tropical parts of Australia. A similar graphical method, named the "hythergraph," enables one to study the distribution of plant life.

The last 150 pages of the memoir are taken up with detailed regional studies. The country is divided into fifteen major regions on the basis of rainfall. For each section

there is a study of the physiography; vegetation; origin, distribution, and effects of the rains; health; economics, etc. These pages contain the first detailed study of the physiography of the whole of Australia and are accompanied by colored contour maps not previously published for most of tropical Australia. An outstanding feature of this regional discussion is the large series of weather maps, illustrating the various types of rains occurring in each section. We have never had a study of Australian rainfall types so complete as the present one. Mr. Henry A. Hunt's "Types of Australian Weather" (1896) was, however, a valuable and worthy predecessor.

It is quite impossible to give a summary of Dr. Taylor's very exhaustive study. He has given us a monograph of real and permanent value. He has made his writing interesting, in spite of the many details with which he deals, because he is keenly alive to every human response to the climatic and topographic environment. It would be well for all students of geography if there were many more such investigations, carried out by authors as competent as is Dr. Taylor and as thoroughly sympathetic with the broader aspects of the subjects with which they are dealing. R. DEC. WARD

BEST, ELSDON. **The land of Tara and they who settled it: The story of the occupation of Te Whanga-nui-a-tara (the great harbour of Tara) or Port Nicholson, by the Maori.** Diagr. *Journ. Polynesian Soc.*, Vol. 26, 1917, No. 4, pp. 143-169; Vol. 27, 1918, No. 1, pp. 1-25; No. 2, pp. 49-71; No. 3, pp. 99-114; No. 4, pp. 165-177; Vol. 28, 1919, No. 1, pp. 1-17. New Plymouth, N. Z.

COTTON, C. A. **Mountains.** Ills. *New Zealand Journ. of Sci. and Technol.*, Vol. 1, 1918, No. 5, pp. 280-285. Wellington. [Brief summary of the author's work on the evolution of the mountains of New Zealand.]

MAYER, A. G. **Ecology of the Murray Island coral reef.** Maps, diagrs., ills. *Papers from the Dept. of Marine Biology of the Carnegie Inst.*, Vol. 9, 1918, pp. 3-48. Washington, D. C.

OSTENFELD, C. H. **Contributions to West Australian botany. Part II.** 66 pp.; map, diagr., ills. *Dansk Botanisk Arkiv*, Vol. 2, 1918, No. 8. Copenhagen. 4 kroner. 9½ x 6½. [Part I of this study, which contains some phytogeographic material, is noted in the *Review*, Vol. 2, 1916, p. 483.]

—— ***New South Wales, Geological map of.*** [1:1,137,760.] Prepared under the direction of E. F. Pittman, Government Geologist, Department of Mines. Inset: Australia, showing positions of Lord Howe and Norfolk Islands, 1 in. to 400 miles. Department of the Interior, Sydney, 1914.

—— ***New South Wales, Physical map of.*** [1:1,137,760.] Department of Lands, Sydney, 1915. [Hypsometric map with elementary hachuring (practically only for the divides) and three very general tints of brown for altitudes of 0-2,000, 2,000-3,000, and over 3,000 feet.]

—— ***New South Wales railways, Map of,*** showing coach and other routes from the various stations, together with mileage from Sydney, with diagrams of North Coast, South Coast, and parts of Southern and Western lines. 1 inch to 29 miles (1:1,837,440). Department of Lands, Sydney, 1918.

—— ***Trans-Australian Railway, Commonwealth Railways map shewing route of.*** [1:1,300,000.] Commonwealth Railways, [Melbourne,] 1918.

POLAR REGIONS

ARCTIC

—— **Baffin Bay and Davis Strait, Monthly meteorological charts of.** Published by authority of the Meteorological Committee. 1 page of text and 12 plates of maps. *Meteorological [Publ.] No. 221.* London, 1916.

The discussion during the past few years of the feasibility of the Hudson Bay steamship route has directed popular as well as scientific attention to the meteorological conditions of the whole northeastern portion of the North American continent and of its adjacent water areas and especially to the controls which the winds and the weather have over the amount of ice and its movement. The publication of the "Monthly Meteorological Charts of Baffin Bay and Davis Strait" was undertaken by the British Meteorological Office at the request of the Board of Trade and on the recommendation of the Conference on Ice Observation Vessels convened by that board in November, 1912. The data upon which the charts are based were obtained from logs kept

especially for the Meteorological Office on board of exploring and whaling vessels. There are twelve charts, covering the six months May to October. For the remaining six months no data are available, or the data are insufficient. Six charts show the winds, pressure, air and water temperatures, and surface currents; the remainder give the available information with regard to the state of the ice in Davis Strait and Baffin Bay. In all about 39,000 sets of observations were used. Many facts of scientific as well as of practical interest are brought out and emphasized in the text. The winds most characteristic of the bay and strait are southeast and northwest, i. e. either up or down these bodies of water. Gales are associated with the passage of cyclonic depressions traveling, almost invariably, from west to east. The information regarding the currents may be considered particularly reliable. It is noteworthy that the Labrador Current, which is largely caused by the action of winds from the northward in the higher latitudes, is a good deal accelerated by the northerly winds which are frequent in these regions during most of the year. In contrast with the ice-congested area, which impedes or bars navigation in the bay and in the northern part of Davis Strait during three of the six months covered by the present charts, there are certain relatively ice-free sheets of water in summer and early fall in various parts of Baffin Bay or its tributaries. These are probably due to the upwelling of an undercurrent of oceanic origin from the south. Field ice is the most frequent form of ice in Baffin Bay and Smith Sound, while in Davis Strait the respective frequency of field, drift, and berg ice is about equal.

Regarding the charts themselves, it may be said that they present the available facts clearly and in great detail. Anyone who examines them, even in a cursory manner, cannot fail to be impressed by the large amount of meteorological and oceanographical information now available concerning these northern water areas, which are probably regarded by many persons as still practically unknown. The charted information in several cases extends as far as 80° N. From the practical point of view of the navigation of Hudson Strait it is, of course, disappointing that the words "no information," or "insufficient data," appear on several of the charts. For July and August, however, a fair amount of meteorological material is available right through to Hudson Bay.

It is, perhaps, not out of place to call attention to an important monograph, published ten years earlier than the charts reviewed above and dealing with the same area, by Dr. Ludwig Mecking, entitled "Die Eistrift aus dem Bereich der Baffin-Bai beherrscht von Strom und Wetter" (*Veröffentlichungen des Inst. für Meereskunde . . . Univ. Berlin,* No. 7, Jan., 1906). A comparison between the effects of currents and of wind on drift ice, based upon theoretical calculation, as well as upon empirical facts, is followed by a very detailed discussion of the ice drift in Baffin Bay as dependent upon currents and upon weather conditions, as evidenced by observation. The currents in Baffin Bay, as well as in the adjacent areas of Davis Strait, Hudson Bay, Melville Sound, etc., and extending as far as the Gulf of St. Lawrence on the south and the southeastern coast of Greenland on the east, are clearly shown on an excellent chart. Further, a series of small charts shows the isobars for the months of July and August preceding certain years whose ice conditions were selected for special study. A comparison between the prevalence of icebergs and of floe ice in each year and of the accompanying weather is made by means of a series of curves. The general weather conditions of the preceding summer were found to be the controlling factor in determining the amount of ice of glacial origin in the region under discussion, while the amount of floe ice is determined by the pressure gradient in the preceding November-January between southern Greenland and the mouth of the St. Lawrence River.

The first of the two publications here reviewed is essentially cartographic. The second is a very full discussion, with a minimum of maps. Together they give a large and important body of material on the ice of the Baffin Bay region. R. DEC. WARD

CHAFE, E. F. **The voyage of the *Karluk* and its tragic ending.** *Geogr. Journ.,* Vol. 51, 1918, No. 5, pp. 307-316.

EKBLAW, W. E. **The Danish Arctic station at Godhavn.** Map, ills. *Amer. Museum Journ.,* Vol. 18, 1918, No. 7, pp. 581-599.

—— **Eskimo, The origin of the.** Map. *Scottish Geogr. Mag.,* Vol. 33, 1917, No. 10, pp. 458-465. [Review of "An Anthropological Study of the Origin of the Eskimo Culture" by H. P. Steensby, Copenhagen, 1916.]

GALITZIN, B[ORIS]. **La délivrance de l'expédition Vilkickij dans les glaces polaires et le caractère synoptique de l'hiver et de l'été 1915.** *Bull. Acad. Imp. des Sci. [de Pétrograd],* Ser. 6, 1916, No. 4, pp. 213-218. [In Russian.]

HOEL, ADOLF. **Nouvelles observations sur le district volcanique du Spitsberg du Nord.** 33 pp.; maps, diagrs., ills. *Kristiania Videnskapsselskapets Skrifter: I. Mat.-Naturv. Klasse,* 1914, No. 9. Christiania.

HOEL, ADOLF. **Observations sur la vitesse d'écoulement et sur l'ablation du glacier Lilliehöök au Spitsberg 1907-1912.** 29 pp.; maps, ills. *Kristiania Videnskapsselskapets Skrifter: I. Mat.-Naturv. Klasse,* 1916, No. 4. Christiania.

HOVEY, E. O. **Child-life among the Smith Sound Eskimos.** Ills. *Amer. Museum Journ.,* Vol. 18, 1918, No. 5, pp. 361-371.

MACMILLAN, D[ONALD] B. **Food supply of the Smith Sound Eskimos.** Ills. *Amer. Museum Journ.,* Vol. 18, 1918, No. 3, pp. 161-176.

MACMILLAN, DONALD [B.] **Record-hunting in the Arctic.** Map, ills. *Harper's Mag.,* No. 820, Vol. 137, 1918, pp. 549-562.

—— **No man's land (Spitsbergen).** Reprinted from *The Spectator.* Ills. *Bull. Geogr. Soc. of Philadelphia,* Vol. 17, 1919, No. 1, pp. 23-27.

SPEERSCHNEIDER, C. I. H. **The state of the ice in the Arctic seas, 1918.** 22 pp.; maps. Special Print *Nautical Meteorol. Ann.,* 1918. Dansk Meteorol. Inst., Copenhagen, 1919. [A parallel account in Norwegian and English.]

WISSLER, CLARK. **Stefánsson returned after four years of Arctic exploration.** Map. *Amer. Museum Journ.,* Vol. 18, 1918, No. 7, pp. 600-601.

WORLD AS A WHOLE AND LARGER PARTS

CHAMBERLIN, T. C. **World-organization after the world-war—an omninational confederation.** Map. *Journ. of Geol.,* Vol. 26, 1918, No. 8, pp. 701-727.

CORNISH, VAUGHAN. **Geographical safeguards of the British Empire.** *United Empire,* Vol. 10, N. S., 1919, No. 3, pp. 109-119 (discussion, pp. 118-119). London.

DE MAGISTRIS, L. F. **L'Italia nel Mediterraneo.** *La Geografia,* Vol. 6, 1918, No. 6, pp. 403-428. Novara.

HARRIS, J. H. **The league of nations and the tropics.** *The New Europe,* No. 129, Vol. 10, 1919, April 3, pp. 269-275. London. [The extension of mandatary administration over many of the less developed tropical territories is foreseen.]

LOON, H. W. VAN. **The golden book of the Dutch navigators.** xiii and 333 pp.; maps, ills. The Century Co., New York, 1916. $2.50. 9 x 6.

MILLER, B. LER. **Coal resources of the Americas.** Map, ills. *Bull. Pan Amer. Union,* Vol. 47, 1918, No. 4, pp. 511-533.

—— **Nickel deposits of the world.** With a preface by W. G. Miller and C. W. Knight. Maps, diagrs., ills., index. Reprinted from *Rept. of Royal Ontario Nickel Commission, 1917,* pp. 95-286. A. T. Wilgress, Toronto, 1917. [This reprint gives the chief geographic facts concerning the occurrence and production of a metal whose economic distribution is remarkably restricted. In 1913 the world production of nickel was approximately 30,000 tons, coming almost exclusively from two widely separate regions—Sudbury, Ontario, and New Caledonia. The circumstances under which the Canadian industry is conducted are well known; the New Caledonia industry is not so well known, and a geographical description of the island precedes the discussion of it. Before the commencement of Canadian competition in 1887 New Caledonia controlled the nickel market. In 1913 the production of the French island was only one-fifth that of her rival. The chief factors in the decline, absolute as well as relative, are the proportionately heavy cost of ore freight and still more the comparatively small size of the ore bodies.]

VAUGHAN, T. W. **Some shoal-water corals from Murray Island (Australia), Cocos-Keeling Islands, and Fanning Island.** Ills., bibliogr., index. *Papers from the Dept. of Marine Biology of the Carnegie Inst.,* Vol. 9, pp. 51-234. Washington, D. C., 1918.

VAUGHAN, T. W., J. A. CUSHMAN, M. I. GOLDMAN, M. A. HOWE, AND OTHERS. **Some shoal-water bottom samples from Murray Island, Australia, and comparisons of them with samples from Florida and the Bahamas.** Maps, diagrs., ills. *Papers from the Dept. of Marine Biology of the Carnegie Inst.,* Vol. 9, pp. 239-297. Washington, D. C., 1918.